

# ED386514 1995-07-00 The Impact of Vocational Education on Racial and Ethnic Minorities. ERIC/CUE Digest, Number 108.

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## The Impact of Vocational Education on Racial

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This digest analyzes information from two recently completed national surveys to determine the extent to which various vocational education programs improve the employment opportunities for ethnic and racial minorities in the United States. Since some vocational education programs include courses that prepare students to take the General Educational Development (GED) examination for high school equivalency, the impact of a GED certificate on workers' wages is also analyzed.

The surveys on which this analysis is based are the 1992 National Adult Literacy Survey (NALS) and the 1991 Workplace Literacy Assessment Survey. NALS, a national survey conducted by the National Center for Education Statistics and the Educational Testing Service, sampled 14,900 adults aged 16 and older in the United States (with African Americans and Hispanics over-sampled). The overwhelming majority of the vocational education programs that persons in the NALS sample participated in were traditional ones with relatively little emphasis on academics.

The Workplace Literacy Assessment Survey was carried out by the Educational Testing Service and the U.S. Department of Labor. It profiled and assessed a national sample of approximately 8,000 persons enrolled in Job Training Partnership Act programs, applying for jobs through the Employment Service system, and filing claims for Unemployment Insurance.

## SECONDARY VOCATIONAL EDUCATION

Those who attended high schools with a college preparatory focus generally earned more than similar persons who attended high schools with a vocational, technical, or trade focus. For example, African Americans who attended a vocational high school earned almost 17 percent less than African Americans with otherwise identical characteristics (such as age, literacy skills, and disability status) who attended a general high school. These findings are consistent with the view that traditional vocational education programs serve as a "dumping ground" for African American and other minority students who are labeled underachievers.

College preparatory high school programs are associated with success in the labor market. Analysis of the NALS data indicates that the positive impact of these programs on income is closely linked to their better quality of schooling. Because college prep programs significantly raise the literacy skills of their students, they also raise their earnings. By contrast, vocational education programs tend to reduce earnings, in part

because they are associated with lower literacy skills. The importance of integrating academics into high school vocational education programs is underscored by these findings.

## POSTSECONDARY VOCATIONAL EDUCATION

Both the public and the private sector sponsor a variety of postsecondary vocational programs. Ethnic and racial minorities tend to have much higher rates of participation in public sector programs. According to the NALS data, of working people, close to 5 percent of African American men and 6.6 percent of African American women had participated in a public sector postsecondary training program, compared to only 1.2 percent of white men and 1.7 percent of white women. Participation figures for Hispanic men and women fell in the middle 2.7 percent for men and 4.2 percent for women. This difference between public and private vocational education program participation is critical. While privately sponsored postsecondary vocational education is associated with higher earnings, public vocational education is not. In fact, salary increases resulting from publicly sponsored postsecondary vocational education are nearly nil, and this is true for men, women, African Americans, whites, and Hispanics.

For men in the NALS sample, participation in a vocational program sponsored by an employer or union raises hourly earnings by 7.8 percent. For women, the salary increase from a privately funded postsecondary vocational education is 22.8 percent.

The economic benefits of private postsecondary vocational education vary also by race and ethnicity. Both for men and women, vocational education funded by an employer or union provides greater gains for blacks and Hispanics than for whites. Among Hispanics, the earnings gains associated with private sector postsecondary vocational education are substantial 29.4 percent among men and 62 percent among women. For blacks the increases are also relatively high 11.8 percent for men and 27.8 percent for women. Among whites, the increases are 7.5 percent for men and 18.3 percent for women.

The type of private sector program also affects the amount of benefits for the various population groups, according to data from the Workplace Literacy Assessment Survey. Workplace apprenticeships are strongly related to increased earnings but only for men. For both black and white men, participation in an apprenticeship program raises earnings by about 20 percent on average. For Hispanic men the impact is even bigger: a 35 percent gain in earnings. Among women whether white, black, or Hispanic there is no statistically significant connection between earnings and participation in an apprenticeship, which may be explained by the clustering or tracking of women into lower paying occupations.

## INCORPORATING GED COURSES INTO

# VOCATIONAL EDUCATION PROGRAMS

Some vocational education programs incorporate high school equivalency (GED) courses into their curriculum. In recent years, many policymakers have expressed support for an expansion of this linkage. While some researchers (Cameron & Heckman, 1993; Murnane & Willett, 1993) have raised doubts about the economic value of a GED, others have found that earning a GED certificate has a positive effect on income (Cave & Bos, 1994; Iowa Department of Education, 1992). This is a key issue for ethnic and racial minorities, but analysis has been limited because of the lack of data allowing comparison of GED recipients with high school graduates. Using the NALS results, this digest summarizes the first nationally representative analysis of the consequences of the GED.

## THE VALUE OF A GED CERTIFICATE

**LABOR FORCE PARTICIPATIONMEN.** Male high school dropouts had the lowest labor force participation rate only 58.3 percent were either working or looking for employment. By contrast, the participation rate among those with a GED was 83.4 percent, approximately the same rate as high school graduates.

**WOMEN.** Among women, the labor force participation rate of high school dropouts was the lowest in the sample 36.2 percent. For GED recipients, though, labor force participation was dramatically higher 63.5 percent. Women high school graduates had a labor force participation rate of 58.6 percent.

**AFRICAN AMERICANS, HISPANICS, AND WHITES.** The positive relationship between a GED certificate and labor force participation holds for all the major racial and ethnic groups. Among black men, the labor force participation rate for high school dropouts is 60.5 percent, but among GED holders it is 85.9 percent. For Hispanics, the rate increases from 76.8 percent for dropouts to 93.3 percent for those with the GED. Among whites the participation rate is 52.3 percent for dropouts and 81.6 percent for those with a GED. Again, the greater labor force participation rates associated with a GED are stronger for women.

## HOURLY WAGES

These national results show that the GED provides a substantial advantage in earnings relative to high school dropouts. For people of similar age, race, and ethnicity, a GED provides an increase in wages of 21 percent for men and 18 percent for women, compared to wages earned by high school dropouts. For men, a high school diploma yields wages 15.9 percent higher than those earned by dropouts. Female high school graduates earn only 7.6 percent more than dropouts. Thus, for both men and women, the GED has a stronger positive effect on earnings than has the high school diploma, and for women, the difference is substantial.

## LITERACY SKILLS

Because NALS includes several measures of literacy, the data allow determination of the literacy skills of male and female GED recipients as well as those of high school dropouts and high school graduates.

People with a GED had substantially higher literacy scores than high school dropouts. For both men and women, those with a GED scored at least 50 points higher than dropouts (on a scale of 0 to 500). The scores of GED holders and high school graduates are nearly identical. And yet, as noted above, female GED graduates earn substantially more than females with a high school diploma.

Even though there is no significant difference between GED recipients and high school graduates in terms of literacy skills, there may be differences in motivation that are rewarded in the labor market. If some employers rely on motivation or other personal characteristics as a basis for hiring and salary decisions, and if these traits are more prevalent in GED holders than in high school graduates, then the latter will have fewer job opportunities, and, thus, earn less.

## SUMMARY AND CONCLUSIONS

At the secondary school level, graduates of high schools with a vocational focus generally earn substantially less than persons with similar characteristics who attend high schools with a college preparatory or general academic focus. Since graduates of vocational high schools earn less than graduates of other high schools, and since ethnic and racial minorities are overrepresented in vocational high school programs, their low earnings have a disproportionate impact on minority populations. That the disadvantage of vocational high schools is largely related to the lower literacy skills acquired by their students underscores the importance of efforts to integrate academic subjects into secondary vocational education programs.

Some vocational education programs incorporate courses that prepare students to take a high school equivalency (GED) exam. The results presented in this digest, contradicting previous research, show that dropouts who obtain a GED certificate generally receive higher wages than dropouts who do not.

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